

CLAIMS

What is claimed is:

1. An apparatus that provides digital broadcast television programs to a subscriber, comprising;
a receiver module that receives program data and a local authorization code, wherein the authorization code allows the digital broadcast television programs to be decrypted for viewing;
a transmitter that sends a program selection to a remote site, wherein the program selection is made from the program data;
an order and authorization system receiving the program selection and generating an authorization signal, the authorization signal providing the local authorization code; and
a billing system receiving the authorization request and generating a billing record.
2. The apparatus of claim 1, wherein the billing record debits a subscriber's account.
3. The apparatus of claim 1, wherein the billing system sends the billing record to a subscriber for payment.
4. The apparatus of claim 1, wherein the billing system charges a subscriber's credit card account.
5. The apparatus of claim 1, wherein the billing record is used to debit a cash card included in a terminal, the billing system sending a debit signal corresponding to the billing record to the terminal.
6. The apparatus of claim 5, wherein the cash card is part of a smart card.

1 7. The apparatus of claim 1, wherein the order and authorization system sends a
2 credit signal to a terminal upon receipt of payment from the subscriber.

3 8. An apparatus that provides digital broadcast television program ordering,
4 comprising:

5 an order and authorization system that receives a program order for a terminal
6 in a television distribution network and generates an authorization order that authorizes access
7 to a program;

8 a broadcaster coupled to the order and authorization system that sends the
9 program to the terminal, wherein the program is multiplexed with other digital broadcast
10 television programs, wherein the broadcaster receives the authorization signal, the authorization
11 signal providing a local authorization code addressed to the terminal, the local authorization
12 code allowing the terminal to demultiplex, decrypt and display the program; and

13 a billing system coupled to the order and authorization system, the billing system
14 receiving the program order and generating a billing record.

15
16 9. The apparatus of claim 8, wherein the billing record is used to debit a cash card
17 included in the terminal, the billing system sending a debit signal corresponding to the billing
18 record to the terminal.

19 10. The apparatus of claim 9, wherein the cash card is part of a smart card.

20 11. The apparatus of claim 13, wherein the cash card is removable or fixed to the
21 smart card.

22 12. The apparatus of claim 8, wherein the order and authorization system includes
23 a time out feature that allows cancellation of the program order without incurring a charge, the

09556375-041300
000140578550

1 time out feature effective for a time prior to a start of the program and for a time after the start
2 of the program.

3 13. The apparatus of claim 10, wherein the time after start of the program is five
4 minutes.

5 14. The apparatus of claim 8, wherein the order and authorization system and the
6 broadcaster are colocated with a billing system.

7 15. The apparatus of claim 8, wherein the order and authorization system sends a
8 credit signal to a terminal upon receipt of payment from the subscriber.

9 16. A method for providing broadcast television digital programming, comprising:
10 generating program data related to the digital programming;
11 providing the program data;
12 displaying the program data as a program menu;
13 receiving a program order, the program order designating one or more programs
14 for viewing;
15 sending a program authorization;
16 broadcasting the digital programming, wherein the program authorization
17 provides access to the one or more programs designated by the program order; and
18 waiting for a time out period to determine if a cancel order signal has been
19 received, and if the cancel order signal is not received in the time out period:
20 sending the program order to a billing system, and
21 preparing a billing record.

22 17. The method of claim 16, further comprising:

1 waiting for a time out period to determine if a cancel order signal has been
2 received, and if the cancel order signal is received in the time out period:

3 generating a deauthorization signal; and
4 transmitting the deauthorization signal, wherein the deauthorization signal
5 removes access to a previously authorized program.

6 18. The method of claim 16, further comprising a debit signal corresponding to the
7 billing record to a terminal, the debit signal debiting a cash card in the terminal.

8 19. The method of claim 18, wherein the cash card is part of a smart card.

9 20. The method of claim 16 further comprising a credit signal corresponding to
10 receipt of payment from a subscriber to a terminal.

11 21. A billing system in a television program delivery network, comprising:
12 a central processing unit (CPU) that receives program access data from
13 subscribers to the television program delivery network;
14 an accounting routine operating on the CPU, comprising:
15 a program access routine that reads the program access data;
16 an update routine that updates a subscriber access history file using the
17 read program access data;
18 a pricing routine that determines an amount to bill a subscriber based
19 of data in a price category file and the read program access file; and
20 a billing report generation routine that produces a billing report for the
21 subscriber based on the output of the pricing routine; and
22 a transmission system that transmits the billing report to the subscriber.

1 22. The system of claim 21, wherein the billing report is provided to the subscriber
2 using a monthly account review menu.

3 23. The system of claim 22, wherein the monthly account review menu format is
4 stored in the subscriber's terminal, and wherein the terminal receives the billing report and
5 generates the monthly account review menu.

6 24. The system of claim 22, wherein the montly account review menu is generated
7 at an operations center.

8 25. The system of claim 24, wherein the monthly account review menu is provided
9 a polling signal.

10 26. The system of claim 24, wherein the monthly account review menu is provided
11 with a television program signal.

12 27. The system of claim 21, wherein the CPU is contained in a terminal in the
13 television program delivery system.

14 28. The system of claim 27, wherein periodic billing reports are sent to the location
15 remote from the terminal.

16 29. The system of claim 28, wherein the location is an operations center.

17 30. The system of claim 21, wherein the CPU is included in an oeprations cneter, and
18 wherein the accounting routine further comprises a terminal identifier routine that identifies
19 individual terminals based on receipt of a terminal identification.

1 31. The system of claim 21, wherein the CPU is included in a remote statistical and
2 billing site, the statistical and billing site computing regional and national statistical and billing
3 information.

4 32. The system of claim 31, wherein the statistical and billing site generates individual
5 subscriber bills and wherein the transmission system comprises a system for mailing the
6 individual subscriber bills to individual subscribers.

7 33. The system of claim 21, wherein the CPU maintains an individual subscriber
8 account for each of the subscribers, and wherein the accounting routine further.

9 34. The system of claim 33, wherein if an individual subscriber account is contingent,
10 the CPU generates a deauthorization signal.

11 35. The system of claim 34, wherein the deauthorizations signal blocks transmission
12 of programming to a terminal for the delinquent individual subscriber account.

13 36. The system of claim 34, wherein the CPU generates a delinquency message for
14 transmission to t terminal for th delinquent individual subscriber account.

15 37. The system of claim 33, wherein if an individual subscribers account is delequent,
16 the CPU generates a delinquency message for transmission to a terminal for the delinquent
17 individual subscriber account.